REMARKS

The application has been amended and is believed to be in condition for allowance.

Claims 15-28 remain in this application. Claims 1-14 have been previously canceled.

The indication that claims 17 and 24 are directed to allowable subject matter is acknowledged with thanks.

Independent claims 15, 21 and 28 are amended. Claim 16 was amended. No new matter is entered by way of these amendments.

Claims 15, 19-21, and 26-28 were rejected as anticipated by FORSTER 6,281,797.

Claims 16, 22 and 23 were rejected as obvious over FORSTER.

Applicant appreciates the Response to Arguments section of the Official Action spanning pages 8-9.

In the last response, it was argued that there is no teaching or suggestion in FORSTER of simultaneous use of plural detection methods, and that this plural simultaneous detection is necessary to satisfy the claims. The last response stated that each of the independent claims recites to re-enable emission of radio frequency signals from the remote communication device responsive to 1) a lack of detecting proximity to an aircraft by the sensing system/step, simultaneously with 2) the positioning

system/step being able to obtain positioning information of the container.

Page 9 of the Official Action admits that FORSTER does not specifically state that these actions happen simultaneously. With respect to "simultaneously", the Official Action first states the recitation from claim 15, i.e., "re-enabling emission of radio frequency signals from said remote communication device if lack of proximity to an aircraft is indicated in said step of sensing simultaneously as said step of performing a positioning information obtaining procedure is successful".

The Official Action reasons that there are simultaneous actions inherently disclosed. It appears that the Official Action is trying to use an analogy of an "AND gate" with A and B inputs and an Output, where in order to have a "1" at the Output, there must be present simultaneously two "1" values at A and B inputs. In the analogy, the Output is the recited reactivation, and that the input A is "the container is not in proximity of the aircraft" and that the input B is "the GPS system locates the container". Therefore, the Official Action reasons that if FORSTER teaches that when "the container is not in proximity of the aircraft" and "the GPS system locates the container" then "reactivation" occurs, these is a simultaneous action.

This analysis fails for the reasons outlined below, the claims having been amended.

The independent claims have been similarly amended. Claim 15 will be addressed below, although the same arguments apply to claims 21 and 28.

Claim 15 requires the steps of: 1) performing a positioning information obtaining procedure concerning said container; 2) sensing whether said tracking device is in proximity to an aircraft by detecting electromagnetic fields emitted by said aircraft; and 3) disabling emission of radio frequency signals from said remote communication device if proximity to an aircraft is indicated in said step of sensing. Claim 15 also requires the step of re-enabling emission of radio frequency signals from said remote communication device only if lack of electromagnetic fields emitted by said aircraft is established simultaneously as a positioning information obtaining procedure is successful performed.

As amended, the claims are believed to be both novel and non-obvious. The dependent claims are believed allowable at least for depending from an allowable claim.

FORSTER

FORSTER is largely directed to disclosing different alternative methods for judging whether a transportation container is in the vicinity of a transport vessel. In doing so, FORSTER discusses many different active and passive detectors. FORSTER also discusses the re-enabling of radio emission when a

container is believed to have left the transport vessel. Figure 6 is relevant.

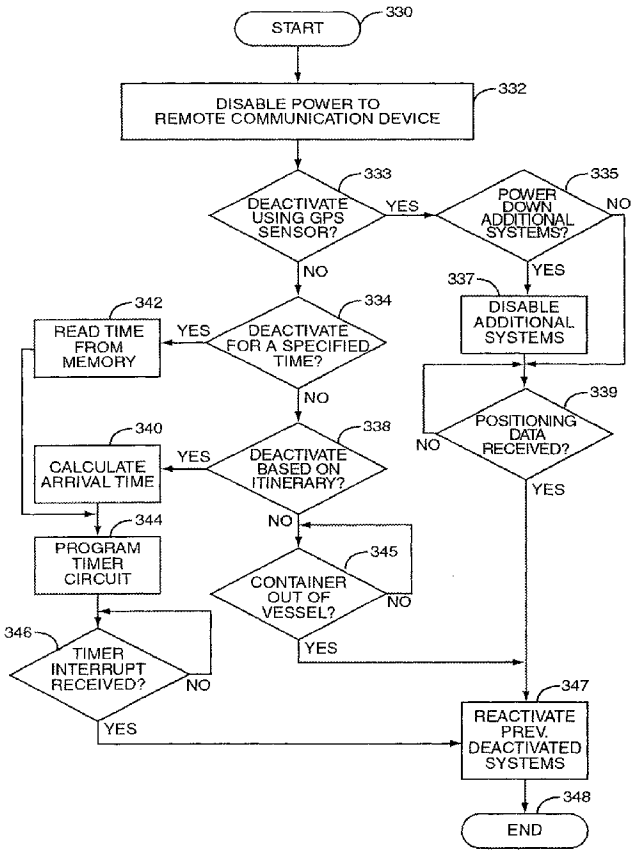

FIG. 6

In contrast to FORSTER, the present invention recognizes that the re-enabling of the emission of radio-frequency signals should be limited to very well controlled occasions. The motivation for this restricted approach to re-enabling emission is based on the security requirements in connection with flight transportation.

A weakness in FORSTER is the teaching that once one particular detection principle is used for deactivating the remote communication device, the very same detection principle is

also used for reactivating the remote communication device. More precisely, if the lack of GPS signal was the cause of deactivation, as checked in step 333 of Figure 6, then the reappearance and only the reappearance of the GPS signals can cause a reactivation, see steps 339 and 347. If on the other hand, a detection of the vessel is used, e.g., the presence of a particular RF signal, the step 333 permits the operation to proceed eventually to step 345. In step 345, the vanishing and only the vanishing of the vessel proximity signals, such as the RF signal can cause a reactivation in step 347.

Thus, FORSTER teaches a number of different detection principles to be used in the context of tracking containers. The disclosure is designed for offering a wide range of alternative methods, from which the skilled in the art could make his selections. However, the different detection principles were not thoroughly evaluated in FORSTER concerning safety aspects during the phase of reactivating the communication device in different scenarios. Advantages may from case to case guide the skilled in the art to at least remove the least advantageous detection principles from the list of potential possibilities. There is, however, absolutely no reason for the skilled in the art to require more than one of the detection principles. A combination would be more complex and expensive to implement and the skilled in the art obviously would look in the opposite direction. If more than one detection principles anyway were to be used, such a

use would operate more for redundancy reasons in case of detector failure (as expressed by Fig. 6).

In FORSTER, the situations which allow re-enabling of radio emission are thus not safe enough, since there are situations where the criteria for allowing re-enabling may be present also before the container has left the transport vessel. According to the present invention, criteria are provided in order to assure that the radio emission won't harm any flight equipment.

For this result, the pending claims require that two conditions are simultaneously verifiable in order to be allowed to re-enable. That is, the claims require 1) that there are no electromagnetic fields emitted by the aircraft, and at the very same time, 2) successful performance of a positioning information obtaining procedure. Thus, only if these two conditions simultaneously are met, a re-enabling procedure is allowed.

In FORSTER, such a simultaneous active check of two conditions is neither explicitly nor implicitly disclosed. In Figure 6, different alternative for enabling allowance are illustrated, however, in a very distinct EXCLUSIVE manner. The flow diagram is branching out depending on what method that was used for the deactivation. The different branches are not joined together until the re-enabling again is allowed. In other words, one the FORSTER system has used a certain approach for deactivating the radio emission, the very same approach is also

EXCLUSIVELY used for allowing re-enabling. As seen in Figure 6, if a proximity detector is used for deactivation, the procedure will proceed straight down to step 345, where the proximity continuously is monitored. When proximity is no longer detected, re-enabling is allowed in step 347. There is a direct path from step 345 to step 347 leaving no optional choices. A successful positioning determination may very well be verified after step 347 has been performed, but the enabling decision has by then already been taken.

Thus, in contrast to the present invention, FORSTER teaches EXCLUSIVE use of alternative methods. The reasons for this appears that if there are any discrepancies between situations where the different methods give an indication could result in a situation where the radio emission repeatedly is deactivated and then immediately again re-enabled. To avoid such unwanted schemes, the use of the different methods is illustrated as obviously EXCLUSIVE. Under no occasion does FORSTER teach two different determination methods simultaneously being used.

Accordingly, the “AND function” analysis of Official Action page 9 fails.

As previously presented, it was not until the present inventor found scenarios where all the single detection principles of FORSTER would fail, that the first motivation to look for different solutions appeared. One example of such a scenario would be an airplane on which a container is loaded.

The airplane has its electrical system running when the container is loaded and the detection of typical frequencies of RF signals is causing a deactivation of the communication device. (Step 334 in Fig. 6 would direct the process to step 345.) The airplane takes off, but during the flight, the electrical system fails. A security DC electrical system is then turned on to serve only the most vital operations of the airplane. However, at the same time the RF signal also disappears, since DC electrical systems do not emit RF signals. The detector on the container will interpret the situation as if the container has left the airplane and will reactivate the communication device. (Compare steps 345 and 347 of Fig. 6.) This is the worst possible occasion for the communication device to start to send, and the entire safety of the airplane is threatened.

When having realized that such scenarios are possible and indeed may be very dangerous, the inventor looked for new approaches. By selecting a very distinct combination of the RF detection (which indeed was the basic failing method) and the GPS detection, it was possible to circumvent the problems. It is thus not only any combination between two arbitrary detection methods, but the very best combination for this particular problem. Furthermore, the combination is made particularly for the reactivation process. The deactivation process can still be performed by a single detection method. Such aspects are not

within the skills of an ordinary skilled person within the art at the time of the invention.

As a conclusion, it would not be obvious for anyone skilled in the art to allow a re-enabling of the communication device only if a lack of lack of electromagnetic fields emitted by the aircraft is established simultaneous with a positioning information obtaining procedure being successfully performed.

Accordingly, the claims are believed non-obvious; allowance of all the claims is solicited.

This response is believed to be fully responsive and to put the case in condition for allowance. An early and favorable action on the merits is earnestly requested.

Should there be any matters that need to be resolved in the present application; the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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